

CLAIMS

I claim:

1. A device for promoting crystallization of integral membrane proteins, comprising:
 - a surface; and
 - a coating of alkylketene dimers doped with a nucleating compound on said surface.
2. The device of claim 1 where said alkylketene dimers comprises stearoylketene dimers.
3. The device of claim 1 where said nucleating compound is a dialkyl ketone.
4. The device of claim 1 where said nucleating compound is a distearoyl ketone.
5. A method of preparing a surface to promote crystallization of integral membrane proteins, comprising:
 - coating a surface with an alkylketene dimer doped with a nucleating compound.
6. The method of claim 5 where said alkylketene dimers comprises a stearoylketene dimer.
7. The method of claim 5 where said nucleating compound is a dialkyl ketone.
8. The method of claim 5 where said nucleating compound is a distearoyl ketone.
9. The method of claim 5 where said coating is applied by a process comprising vapor deposition.
10. A method of crystallizing integral membrane proteins, comprising:
 - applying a droplet of integral membrane proteins in solution to a surface coated with alkylketene dimers doped with a nucleating compound.

11. The method of claim 10 where said applied droplet is applied on top of said coated surface as a sitting drop.

12. The method of claim 10 where said applied droplet is applied to said coated surface as a hanging drop or a sandwich drop.